

Appl. No. 09/759,552
Atty. Docket No. 8394
Amdt. dated May 15, 2007
Reply to Office Action of Feb. 16, 2007
Customer No. 27752

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ATTACHMENT: PRESENTLY PENDING CLAIMS AS AMENDED

1. An electrostatic spraying device structured to deliver a product from a reservoir through a channel to a point of dispersal, to electrostatically charge the product via a high power electrode after the product has exited the reservoir and to dispense the product from an exit orifice of a nozzle, wherein said device comprises:

a power source to supply an electrical charge; and

a high voltage power supply to charge the high voltage electrode and to supply a variable output signal in response to a feedback signal.
2. The electrostatic spraying device of Claim 1, wherein said feedback signal monitors a voltage level at said high voltage electrode.
3. The electrostatic spraying device of Claim 1, wherein said feedback signal monitors a voltage level within said high voltage power supply.
4. The electrostatic spraying device of Claim 3, wherein said feedback signal monitors a voltage level at a primary coil of a high voltage transformer.
5. The electrostatic spraying device of Claim 3, wherein said feedback signal monitors a voltage level at a storage capacitor within said high voltage power supply.
6. The electrostatic spraying device of Claim 1, wherein said high voltage power supply alters a current level supplied through said high voltage power supply in response to said feedback signal.

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7. The electrostatic spraying device of Claim 1, wherein said high voltage power supply varies said output by varying a frequency of a control signal of a DC/DC converter of said high voltage power supply.
8. The electrostatic spraying device of Claim 1, wherein said high voltage power supply is further configured to deactivate the delivery of the product from the reservoir prior to deactivating the high voltage power supply.
9. The electrostatic spraying device of Claim 1, wherein said high voltage power supply is further configured to activate the high voltage power supply before activating the delivery of the product from the reservoir.
10. The electrostatic spraying device of Claim 1, wherein said high voltage power supply adjusts said output signal of said high voltage power supply in response to a change in a flow rate of the product.
11. The electrostatic spraying device of Claim 1, wherein said high voltage power supply is encased in a sealant.
12. The electrostatic spraying device of Claim 1, further comprising a moisture-proof barrier for sealing the device.
13. An electrostatic spraying device structured to deliver a product from a reservoir through a channel to a point of dispersal, to electrostatically charge the product via a high power electrode after the product has exited the reservoir and to dispense the product from an exit orifice of a nozzle, wherein said device comprises:
a power source to supply an electrical charge; and

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a high voltage power supply electrically connected to said power source to charge the high voltage electrode and to supply a variable output signal in response to a feedback signal; and
a high voltage resistor electrically connected to an output of the high voltage power supply to drain said stored charge of the high voltage power supply.